

# **EXHIBIT I**

1 IN THE UNITED STATES DISTRICT COURT  
2 FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA  
3 CHARLESTON DIVISION  
4 - - - - - x  
5 IN RE: ETHICON, INC. PELVIC REPAIR Master File No.  
6 SYSTEM PRODUCTS LIABILITY LITIGATION MDL 2327  
7 - - - - - x  
8 THIS DOCUMENT RELATES TO:  
9 DIANNE M. BELLEW  
10 Plaintiff  
11 v. Case No. 13-cv-22473  
12 ETHICON, INC., et al.  
13 Defendants  
14 - - - - - x  
15  
16 DEPOSITION OF HOWARD C. JORDI, PH.D.  
17 Tuesday, August 19, 2014  
18 9:03 a.m.  
19 Jordi Labs, LLC  
20 200 Gilbert Street  
21 Mansfield, Massachusetts  
22  
23 Michelle Keegan, Court Reporter  
24  
25

1 Q. How many measurements did you take of the  
2 surface layer of the degradation that you claim to have  
3 identified?

4 A. The surface layer? How many measurements for  
5 the melt point or the --

6 Q. The thickness.

7 A. The thickness?

8 Q. Yes.

9 A. It wasn't our goal with that assay, so we just  
10 got one and left it.

11 Q. Okay. And the only test that you conducted to  
12 determine the thickness of the surface layer of what you  
13 identified to be degradation was approximately 1 micron.  
14 Correct?

15 MR. THORNBURGH: Objection.

16 A. We saw one -- we measured one 1-micron crack.  
17 That's all I can tell you.

18 Q. Okay. Do you have any other measurements that  
19 you conducted to help you understand the thickness of  
20 what you've identified as a surface layer of  
21 degradation?

22 A. We weren't really going after that. We were  
23 going after chemical makeup, so as opposed to physical  
24 depth.

25 You could get some other estimate perhaps from

1           A.    No.  We just looked at those two antioxidants.

2           Q.    Okay.  And you also mentioned environmental  
3        stress cracking.  Tell me what evidence you have --  
4        scientific evidence that you have in this case that  
5        proves to you that the Bellew mesh explant experienced  
6        environmental stress cracking.

7           A.    Well, Number 1, we have the SEM work which  
8        clearly shows the cracks.  So the cracks are a fact,  
9        just no way around it.

10           The only question left is what causes the  
11        cracks.  We ruled out the protein coat from the IR work,  
12        which left us with only polypropylene.

13           And then we ran PYMS, which showed the presence  
14        of fatty acids and cholesterol esters, which are known  
15        even to Ethicon's own researchers to be environmental  
16        stress crack agents.  They were present.

17           We saw oxidation from the FTIR.  Oxidation will  
18        lead to cracking.  Cracking will lead to the ability of  
19        the fatty acids and the cholesterol esters to get into  
20        the cracks and enlarge the cracks by environmental  
21        stress cracking.  So the package just fits.

22           Q.    Is there a way you're aware of to conduct any  
23        test to prove that, in fact, environmental stress  
24        cracking occurred in Ms. Bellew's explant?

25           MR. THORNBURGH:  Are you asking to a reasonable

1 Q. Where did the environmental stress cracking  
2 start in the Bellew explant?

3 MR. THORNBURGH: Objection.

4 A. It had to start on the surface because that's  
5 where it is.

6 Q. Where on the surface?

7 A. Well, it's basically scattered all over it.

8 Q. Okay.

9 A. As shown by the SEM micrographs.

10 Q. Do you agree that fast crack propagation is a  
11 necessary part of environmental stress cracking?

12 A. It's part of it.

13 Q. And --

14 A. That's -- And that's -- by the way, that's when  
15 you're talking about exclusively environmental stress  
16 cracking. We're talking about a combination here of  
17 oxidation and environmental stress cracking. It's more  
18 complicated than just environmental stress cracking by  
19 itself without oxidation.

20 Q. You testified a moment ago that the degradation  
21 of this explant was limited to the surface of the  
22 explant. Correct?

23 A. Correct. First few microns.

24 Q. And is it fair to conclude that there had been  
25 no crack propagation through the -- Strike that.

1 And all those little bands at 1165, 999, 972, 841 are  
2 all polypropylene, which are very, very weak. And the  
3 fact that they're so clear there is -- it makes it look  
4 very similar to the spectrum of a pure polypropylene,  
5 which is back there a couple of charts.

6 If you go back and look at 55, you'll see a  
7 pure polypropylene. And that spectra we have there is  
8 essentially pure polypropylene.

9 So except for the oxidation bands and that  
10 little bit of unidentified, everything else in the  
11 spectrum is polypropylene, plus a little bit of water,  
12 when you compare 55 and 60.

13 Q. Let's go to page 84 of your report, please.

14 The last paragraph says, "It can be stated to a  
15 reasonable degree of scientific certainty that  
16 degradation in these fibers is a surface phenomenon  
17 initially, which will more likely than not continue  
18 deeper and deeper into the fiber as time passes."

19 The last part of that sentence is what I'm  
20 interested in.

21 There's no evidence from the work that you've  
22 done in this case that the degradation that you've  
23 described here was more than a surface phenomenon on  
24 Ms. Bellew. Correct?

25 MR. THORNBURGH: Objection.

1 A. In Ms. Bellew, yes.

2 Where are you reading here? Page 84?

3 Q. Yes.

4 A. Which paragraph?

5 Q. Third paragraph.

6 And then you say after that that "more likely  
7 than not continued deeper and deeper into the fiber as  
8 time passes."

9 A. Right.

10 Q. I've not seen any analysis in your report to  
11 explain how that happens.

12 MR. THORNBURGH: Objection.

13 A. It happens the same way that the surface layer  
14 degradation happens. It takes longer because it's  
15 further in. The inside is more crystalline, and so it's  
16 less susceptible to degradation in general. But it will  
17 slowly occur.

18 That's based on my 40 years of experience doing  
19 testing. I've seen this over and over again.

20 Q. 40 years of testing of what?

21 A. All kinds of plastics, including polypropylene.  
22 I remember doing a stadium seating problem in Japan  
23 where literally 100,000 seats turned to dust and blew  
24 away, all polypropylene, because of lack of antioxidant.  
25 It went right through the surface layer, went to the

1 COMMONWEALTH OF MASSACHUSETTS

2 SUFFOLK, SS.

3

4 I, Michelle Keegan, Registered Merit Reporter and  
5 Notary Public in and for the Commonwealth of  
6 Massachusetts, do hereby certify that HOWARD JORDI,  
7 PH.D., the witness whose deposition is hereinbefore set  
8 forth, was duly sworn by me and that such deposition is  
9 a true record, to the best of my ability, of the  
10 testimony given by the witness.

11 I further certify that I am neither related to nor  
12 employed by any of the parties in or counsel to this  
13 action, nor am I financially interested in the outcome  
14 of this action.

15 In witness whereof, I have hereunto set my hand and  
16 seal this 25th day of August, 2014.

17

18

19

20

21 Notary Public

22 My commission expires:

23 May 16, 2019

24

25